2. A system as in claim 1, wherein the tooth positions defined by [the] one or more cavities in each successive appliance differ from those defined by the prior appliance by no more than 2 mm.

3. A system as in claim 1, comprising at least two intermediate appliances.

4. A system as in claim 3, comprising at least ten intermediate appliances.

5. A system as in claim 4, comprising at least twenty-five intermediate appliances.

6. A method for repositioning teeth from an initial tooth arrangement to a final tooth arrangement, said method comprising the following steps performed in a preselected order:

successively placing three or more appliances having geometries selected to progressively reposition the teeth from a first arrangement to successive arrangements; and

placing one or more wire and bracket systems to progressively reposition the teeth from one arrangement to a successive arrangement, the brackets and appliances being deployed in seriatim to reposition teeth from the initial tooth arrangement to the final tooth arrangement.

7. A method as in claim 6, where the tooth positions defined by [the] one or more cavities in each successive appliance differ from those defined by the prior appliance by no more than 2 mm.

8. A method as in claim 6, wherein the successively placing step comprises placing at least two additional appliances prior to placing the final appliance.

9. A method as in claim 8, wherein the successively placing step comprises placing at least ten additional appliances.

10. A method as in claim 9, wherein the successively placing step comprises placing at least twenty-five additional appliances.

11. A method as in claim 6, wherein the appliances are successively replaced at an interval in the range from 2 days to 20 days.

12. An improved method for repositioning teeth using appliances comprising polymeric shells having cavities shaped to receive and resiliently reposition teeth to produce a final tooth arrangement, wherein the improvement comprises determining at the outset of treatment geometries for at least three appliances to be used in combination with at least one wire and bracket system, the appliances are to be worn successively by a patient to reposition teeth from an initial tooth arrangement to the final tooth arrangement, wherein the cavities of successive shells have different geometries.

13. An improved method as in claim 12, wherein at least four geometries determined at the outset.

14. An improved method as in claim 13, wherein at least ten geometries are determined at the outset.

15. An improved method as in claim 14, wherein at least twenty-five geometries are determined at the outset.

16. An improved method as in claim 12, wherein the tooth positions defined by the cavities in each successive appliance differ from those defined by the prior appliance by no more than 2 mm.

17. A method as in claim 16, comprising at least two intermediate appliances.

18. A method as in claim 17, comprising at least ten intermediate appliances.

19. A method as in claim 18, comprising at least twenty-five intermediate appliances.

20. An improved method for repositioning teeth using appliances comprising polymeric shells having cavities shaped to receive and resiliently reposition teeth to produce a final tooth arrangement, wherein the at least three appliances are applied successively to a patient's teeth to reposition the teeth, wherein the improvement comprises repositioning the teeth using a wire and bracket system to initially reposition the teeth prior to applying the polymeric shell appliances.

21. An improved method as in claim 20, wherein at least four appliances are applied to the teeth.

22. An improved method as in claim 21, wherein at least ten appliances are applied to the teeth.

23. An improved method as in claim 22, wherein at least twenty-five appliances are applied to the teeth.

24. An improved method as in any of claims 20-23, wherein initially repositioning the teeth using a wire and bracket system configures the teeth to render them amenable to treatment with polymeric appliances.

25. An improvement as in claim 24, wherein initially repositioning the teeth alleviates at least one of the following conditions:

A-P correction of greater than 2 mm;

autorotation of the mandible required for vertical/A-P correction;

CR-CO discrepancy correction/treatment to other than centric occlusion;

correction of moderate to severe rotations of premolars and/or cannines that are greater than 20 degrees;

severe deep bite opened to ideal or open bite to be closed to ideal;

extrusion of teeth greater than 1 mm other than as part of torquing or in conjunction with intrading adjacent teeth;

teeth tipped by more than 45 degrees;

multiple missing teeth;

crowns less than 70% of normal size;

posterior open bite; and

movement of entire arch required for A-P correction.

26. A method for treating a dental malocclusion, said method comprising:

providing criteria to distinguish between a less severe malocclusion and a more severe malocclusion;

determining whether an individual patient's malocclusion is more severe or less severe according to the criteria;

if the malocclusion is determined to be less severe, treating the patient with a plurality of successive polymeric shell appliances having different geometries selected to resiliently reposition teeth to a final desired arrangement; and

if the malocclusion is determined to be more severe, treating the patient successively in a predetermined order with (a) at least one wire and bracket system, and (b) a plurality of successive polymeric shell appliances having different geometries selected to resiliently reposition teeth, wherein the combined treatment repositions the teeth to a final desired arrangement.

27. A method as in claim 26, wherein the criteria which are characteristic of a more severe malocclusion include at least some of the following:

A-P correction of greater than 2 mm;

autorotation of the mandible required for vertical/A-P correction;

CR-CO discrepancy correction/treatment to other than centric occlusion;

correction of moderate to severe rotations of premolars and/or cannines that are greater than 20 degrees;

severe deep bite opened to ideal or open bite to be closed to ideal;

extrusion of teeth greater than 1 mm other than as part of torquing or in conjunction with intrading adjacent teeth;

teeth tipped by more than 45 degrees;

multiple missing teeth;

crowns less than 70% of normal size;

posterior open bite; and

movement of entire arch required for A-P correction.

28. A method as in claim 27, wherein the absence of some or all of the criteria characteristic of a severe malocclusion indicates that it is a less severe occlusion.

29. A method as in any of claims 26-28, wherein providing criteria comprises providing a list of criteria.

30. A method as in claim 26, wherein determining whether the malocclusion is more or less severe comprises obtaining a model of the patient's teeth.

31. A method as in claim 30, wherein the model is a cast.

32. A method as in claim 30, wherein the model is digital.

33. A method as in claim 26, wherein determining whether the malocclusion is more or less severe comprises visually observing the patient's teeth.

34. A method as in claim 26, wherein the predetermined order is to treat the patient's teeth first with the wire and bracket system to partially reposition the teeth until the malocclusion is less severe according to the criteria and then treating the patient with the polymeric shell appliances.

35. A method as in claim 26, wherein the predetermined order is to treat the patient's teeth first with the polymeric shell appliances and then with the wire and bracket system.

36. A method as in claim 26, wherein treating the patient with a plurality of successive polymeric shell appliances comprises successively placing at least three appliances each over a time period in the range from one to four weeks.

37. A method as in claim 36, wherein at least ten successive polymeric appliances are placed

38. A method as in claim 36, wherein at least twenty-five successive polymeric appliances are placed.